



Department of Energy
Washington, DC 20585

March 9, 2016

Mr. John Tappert
Deputy Director
Division of Decommissioning, Uranium Recover, and Waste Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop T8 F5
Washington, DC 20555-0001

Subject: Mine Waste Placement on the Church Rock, New Mexico, Uranium Mill Tailings
Radiation Control Act Title II Disposal Cell Site

Dear Mr. Tappert:

Since 2009, the U.S. Department of Energy (DOE), Office of Legacy Management (LM) has been actively working with you regarding the Environmental Protection Agency's (EPA) proposal to dispose of mine waste from the Northeast Church Rock Mine on the Church Rock Uranium Mill Tailings Radiation Control Act (UMTRCA) Disposal Cell Site (Church Rock) in New Mexico. Our collaboration has been productive, for the good of both the people and the environment, and we would like to thank you for your efforts thus far. Nonetheless, as previously discussed, LM remains concerned from a practical, regulatory and technical standpoint with placing additional material on a completed UMTRCA cell. The existing cell was constructed appropriately for termination of the operator's license issued by the Nuclear Regulatory Commission (NRC). For DOE to assume long term stewardship responsibilities for an envisioned combined disposal structure under a dual post-closure regulatory posture is unfeasible, unsuitable and unacceptable.

DOE has tracked and reviewed the design of the combined mine waste/mill tailings disposal and we appreciate the opportunity to do so. However, DOE is concerned that the mine waste when placed on top of the tailings will affect the integrity of the cell, and the recently revised "95 percent design" would result in a cell with steeper slopes, which is not conducive to low maintenance, and is inconsistent with the 1000 year design life expected under UMTRCA. In addition, DOE does not support the proposal that the site be regulated by both EPA and NRC with post-closure care being carried out by the Department, for the reasons stated below.

Under UMTRCA, DOE can only obtain funding for addressing material that meets the definition of byproduct material under section 11.e.(2) of the Atomic Energy Act of 1954, as amended. There is NRC guidance which provides for the inclusion of non-11.e.(2) material at mill tailing disposal sites. However, NRC must declare the material is acceptable and similar in nature to byproduct material. Additionally, DOE must be given the opportunity to agree that the material is acceptable. Finally, DOE has only accepted non-11.e.(2) material in the past if the new material would not result in any other regulations or regulators to be involved in its long-term surveillance and maintenance of the site.



That said, our understanding of what is currently proposed is for EPA to regulate the mine waste portion of the cell and NRC to regulate the 11.e.(2) material. This proposal would effectively result in two separate disposal facilities on top of one another, with a different set of rules applying to each layer. DOE staff predicts that this could result in significantly higher costs for long-term surveillance and maintenance of the site, and potentially create a situation where DOE might face conflicting opinions from the regulating agencies on management of the site. The situation is further complicated by possibly having two EPA regions involved in regulating the long-term stewardship of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) portion of the site, particularly if there were contaminants discovered off the Church Rock Site. Under the applicable UMTRCA regulations, the design of a disposal cell must be protective and not allow any escape of hazardous waste or leachate. However, if there were releases of such material, it could be difficult to determine from what part of the cell it originated.

One possible solution would be to have EPA manage the entire Church Rock disposal cell site under its CERCLA authority with the General Electric Corporation subsidiary as the primary Potentially Responsible Party. Another possible solution would be to allow NRC to retain the General Electric Corporation subsidiary's license for the foreseeable future, at least until all concerned parties agree no further work is anticipated. The United States has already agreed to provide partial funding for post-closure care of the Northeast Church Rock Mine through the 2010 Consent Decree and Judgment. The Atomic Energy Act (AEA) requirement is that a Federal (or State) agency own and manages the site. However, the Federal agency need not necessarily be DOE. Under the AEA, as amended by UMTRCA, any Federal agency, including EPA can potentially fulfill this responsibility. A third possible solution would be that DOE, NRC, and EPA enter into a Memorandum of Understanding (MOU) that would define the respective roles and responsibilities in a manner similar to the 2002 MOU between NRC and EPA. That MOU is enclosed with this letter.

DOE shares with both EPA and NRC a desire that the mine waste and 11.e.(2) materials be managed in a way that protects human health and the environment. DOE further believes each of the three agencies must agree on a path forward that is workable and acceptable to all, and therefore should hold an executive conference to discuss the ultimate end-state and the extent of our respective responsibilities regarding the Church Rock site. We will be looking forward to hearing from you so that we can come up with an appropriate solution that is acceptable to the three agencies.

Thank you for your attention to this matter. Please contact me to discuss this further, you may call me at (202) 586-4882, or contact David S. Shafer, Ph.D., Director of the Office of Site Operations for DOE-LM at (202) 586-8324 or david.shafer@hq.doe.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Carmelo Melendez', with a stylized flourish extending to the right.

Carmelo Melendez
Director
Office of Legacy Management

Enclosure

cc w/enclosure:

J. Smith, NRC

J. Brooks, EPA R6

C. Edlund, EPA R6

S. Jacobs, EPA R9

E. Manzanilla, EPA R9

A. Kleinrath, DOE-LM (e)

M. Kautsky, DOE-LM (e)

S. Miller, DOE-GC (e)

D. Shafer, DOE-LM (e)

J. Elmer, Navarro (e)

File: CHR 0030.10 (records)